## 432 MHz MHz AND ABOVE EME NEWS

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#### **EME NETS**

14.345, 10 AM ET SATURDAYS, AFTER VARO NET SUNDAYS:

- NET CONTL: JOE, K1RQG (207-469-3492), E-MAIL: Joe, K1RQG
- EME STANDINGS: JIM STARKEY, W0KJY, 3845 CAPITOL DRIVE, FT. COLLINS, CO 80526, (970) 226-0669)
- THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT:

432 MHZ AND ABOVE NEWSLETTERS.

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**432 AND ABOVE PHOTOGALLERIES** 

## **CONDITIONS**

Much of the Feb SW activity focused around the SSB Contest on 1296. The picture will switch in March to 432 because of the REF/DUBUS EME Contest which is scheduled for 7/8 March on 70 cm and the microwave bands (13 cm and above). Full rules for this contest are at the end of this NL. You will want to read the rules carefully as there are a number important changes. Multipliers are no longer call areas in NA, but states and provinces in the US, Canada and Australia. The SSB Contest seemed to work out well. Activity was definitely concentrated around the common Eur moon window, but during this period it was great. Stations which seemed to do particularly well were OE9XXI, LX1DB and OH2AXH. Unfortunately I did not specify a deadline for submission of logs, and to date I have received very few scores. Lets set 20 March as the date for receipt of logs. The 3 highest scoring stations will receive

certificates.

#### CT1DMK

Luis writes -- Here it is my modest SSB Contest score, and some comment for the NL. I worked the following on 1296 in the contest, all QSOs were SSB/SSB unless noted: 2225 OH2AXH KP20, 2243 OZ4MM JO, 2254 OE9XXI JN45, 0013 K2DH FN (SSB/CW), 0041 K2UYH FN and 2334 HB9SV for a score of (10+1)x5 or 55 points. It was great fun. I am just sorry that some stations did not come on SSB after I asked them to transmit on SSB. Even if they could not hear me at all on SSB, I was quite sure that I would have copied them on SSB, while I could transmit on CW, for a 1 point QSO. (As I did with K2DH). Never underestimate my RX. Its always worth a try!

#### **G3LTF**

Peter says -- I had quite a good time in the "contest." But on SSB, the law that says ".. the strength of the other guy's signal is inversely proportional to the likelihood of him hearing you." .. (even if you can hear your own SSB echoes!) applies even stronger than on CW. This was frustrating, see the list of CWNRs later. On 432, I worked on 6 Feb SM3AKW, K4OI and RA3LE - really nice to hear him again. I heard SV1BTR on sked, but he didn't hear me. I also called DL4XX many times. The real activity was on 1296. I worked on CW ZS6AXT, DD1XF, KB0PYO for initial #135, PY5ZBU #136 and DXCC 32, but nil from PA0JCA on sked. On SSB I worked OE9XXI JN47, GW3XYW IO71, OH2AXH KP20, OZ4MM JO55, K2DH FN12, KB2AH FN20, S59DCD JN76, K2UYH FN20, WD5AGO EM26, LX1DB JN39, K5JL EM15, F2TU (CW/SSB) JN38 and DK7LJ JO54. I make that (24+1)x7 for 175 points! CWNR on SSB were HB9BBD, JH5LUZ (many), KD4LT, HB9SV (many), DF3RU, ON5RR, DJ9YW (locators were copied from all of them) and DC6UW, plus VE1ALQ was heard. 1296 Sun noise was measured as 16.5 dB at a flux of 89. On 2304 my receiver failed, so couldn't make my skeds, sorry. Peter has offered to chair a discussion at the Paris EME Conference on the frequency allocation issues for the 13 cm band with the objective of perhaps finding a common frequency, and/or increasing activity. He would like to get information and peoples views on the following: What frequency allocation at 13 cm do you have currently? Is it exclusive or shared? What are the power limits? What are the threats to this allocation in your country? What do you see as the time scale of these and what portion of the band would they affect? What are your views on crossband operation - current operation is at 2304, 2320 and 2424. How big a problem is this? Does it influence whether you equip for the band? Peter would particularly like to find out about the specific frequencies and time scales of the threats such as PCS (future personal communication systems). He welcomes inputs on the above and related issues, and would like to receive them by email at <10063.1656@compuserve.com> or by letter.]

### **G4ERG**

Peter thinks his original Jan report may have gone off into cyberspace as it was missing from the Feb NL, so he has resubmitted the following -- I found good conditions and activity in Jan, and worked OZ4MM, K1FO, HA1YA, HB9SUL for initial #100, NC1I, UR5LX, W7CI #101, K5WXN #102, N2IQU, SM3AKW, DL9NDD, K7XD #103, IK5QLO #104 and LX1DB #105. Heard were WE2Y, UA6LGH, DL8OBU, EA3UM, DL4XX, JH4JLV, DL9KR, JA2TY, JA5OVU, JA5NNS, RA3LE, K9BCT, OE5EYM, G4FUF and K3HZO. Signals in Feb appeared down on the previous month with poor results in most skeds. Nil was heard from JA5NNS, JS3SIM, JA3IAF and DF9QX, and DL4XX (M/-) and K3HZO (O/-). I QSO'd RA3LE, OZ4MM, DF3RU, UR5LX, N2IQU, SV1BTR #106, SM2CEW, JA5OVU, HA1YA, K1FO, NC1I and DK3WG. Heard were OK1KIR, PA3CSG, DL9NDD, K2UYH, SM3AKW, G3SEK, G3LTF, JA9BOH, I5CTE, K0RZ, DL9KR, G4RGK, DL5FN and K5GW.

#### **F6KSX**

J-Jacques, F1EHN writes -- We (F1EHN and F6DLA) are replacing the 23 cm station with the 3 cm one. So, F6KSX will be QRV on 10 GHz for the 2nd part (April) of the REF/DUBUS EME Contest. The station will be a 50 w TWTA with a 3.3 m dish, 0.7 NF LNA and F1EHN tracking system.

#### **HB9BBD**

Dominique now has direct internet access. He reports on his new dish project -- I have had delays for various reasons ... The hydraulic AZ engine, when arrived, had a different flange size than the mounting

holes. An additional steel ring, to strengthen the 24 ribs of the dish, was produced with 4 m radius instead of 4 m diameter! Finally the dish is now finished and ready to fly. The tower is the same. And now all that remains is the hydraulics' testing prior to transport. On 4 Jan I had a sked with PY5ZBUV. He came back about 2.5 kHz high to my initial call. I stayed on freq, but never got a report. I sent (429), but apparently no copy in PY. Then the winds came up and there was no way I could keep the Moon in focus, sorry. I also has a SSB QSO with OE9ERC on 11 Jan (52/52). Regarding contests, I would like to say that there can be never the same chance for all to win... Interest would disappear, if all zones, all dish sizes, all power levels were different contest categories. It would be no fun to be the only station in the category of 8' dishes for example!! (Or just compete with one other station - sorry G4CCH). When I see all the reports with all the different antennas, PAs, preamps, etc; this is what's exiting. It is not trilling to synthetically make us all equal. To win the contest, we all know that ZS6 is the wrong place to be, as well as W6, JA, etc. Let us do what we can with what we have to get respectable results - relative to everybody's handicaps... Regulating to make us all equal takes away from the fun of the contest.

## IK5OLO

Andrea had pol problems during the Feb SW -- I received strong signals from only Eur and NA stations with a dish or Z- mount. QSO'd were K2UYH, K4QI and DF3RU. Heard strong were K1FO, NC1I (539) and DL9NDD. At my moonset K4QI peaked (529) continuously, and was the only station heard. My rig is now 2 x 28 el 9wl yagis, a TS811 with HM 8877 PA (800 w up to 1 kw with CX520 relay), MGF1302 0.4 dB NF LNA and BHY- 2 DSP filter.

#### **JA4BLC**

Yoshiro was unable to be active during Feb SW due to his mothers after-death ceremony, which took place the same weekend. He writes -- Toshi, JR4BRS has seceded in the reception of the lunar prospector at moonrise on 10 Feb. Toshi used his 6 m dish with the W2IMU feed connecting the preamplifier directly to the TX port of the horn. He gets a 20 dB S/N (according to the AF9Y DSP) of the subcarrier on 2274 MHz, and far better on the main carrier on 2273 MHz. His RX is a modified satellite down- converter on 2304 MHz (NF 5 dB) and a ICOM IC-PCR1000 computer- controlled general coverage receiver on 113/114 MHz.

#### **KORZ**

Bill was QRV on 70 cm, and QSO'd on 7 Feb V SV1BTR (O/O) for initial #247, W7CNK (449/449) #248, K7XD (O/O) #249, K4QI, NC1I, W8MQW, K2UYH, K3HZO, WE2Y (O/O) #249 and ON4KNG, on 8 Feb DF3RU, DL4XX (O/O) #250, DL5FN (O/O) #251, UA6LGH, and on 9 Feb K1OR (O/O) #252. All but SV1BTR and DL5FN were random QSOs. Heard during the SW were K1FO, N9AB, PA3CSG, DL9NDD, UR5LX, W7QX, K5GW, N4GJV and VE1ALQ. Condx were fair to good on 70 cm, and activity was good during the SW. Bill continues using fixed horiz polarity.

#### K1FO

Steve again found good activity and conditions during the pre-SW. Libration fading was quite noticeable on Saturday, but much lower on Sunday. Stations worked were on 31 Jan G4RGK, DL4KG, OE5EYM both CW and SSB, IK5QLO and I5CTE, on 01 Feb JA5OVU, KA0RYT, JH1EFA, W7QX, DL8OBU, DL4KG and SV1BTR (O/O) #530, and on 02 Feb W7CNK (439/559) #531, WE2Y, NC1I and JA3SGR. Steve was away on business in Florida the week before the SW. He returned home to find that there was up to 1" (25 mm) of ice on the array. Even worse was that he left the array at only 5 deg el. With the weight of the ice loading on the rear mounted array he could not elevate it. It was also apparent that the array mount and tower was under quite a lot of stress from the weight of the ice. When he tried to rotate polarity to reduce the wind load in the 40+ mph winds, the array spun around 270 deg the wrong way in polarity. Fortunately, the next day the weather was sunny and 40 deg F (4C). In the sunlight, it became apparent why the array spun around. At ground level the ice was only 1/4" thick. At the bottom of the array (85' high) the ice was almost 3/4" thick. At the top of the array, which at 107' was 22' higher than the bottom of the array, the ice was an inch thick. The difference in weight due to the thicker ice on one side of the array was enough to spin the array around. The polarity rotor did not have enough torque to turn the array back around to its correct position. By positioning the array in the sunlight and rocking the polarity back and forth, Steve was able to get about 80% of the ice off the array by 1 PM. He then went up the tower to get the rest of the ice off the array and fix the polarity rotor limit switches. Even with only 20% of the ice still on the array, the movement of the tower, which is normally very low with no ice loading, was quite unnerving. He can barely imagine how devastating the 2 to 4" of ice that accumulated in Canada and Northern New England was. He had the array all set to be QRV at 2100 on 06 Feb, but found out that something was apparently broke in the polarity rotor. Although he could move the array vertical, it would immediately coast back to horizontal. In spite of the limited polarity control, he worked on 06 Feb DL4XX, OZ4MM and K4QI, and on 07 Feb EA3DXU, UA6LGH (with a very bad chirp), S52CW, W8MOW, N9AB and W7CNK. Saturday afternoon he went up the tower to check out the problem. It turned out to be only a stuck brake in the polarity rotor. He worked Saturday night, after the rotor repair, DL8OBU and I5CTE. Steve heard many other stations on, but he may have worked out the band for Feb. On Sunday 08 Feb he worked G4ERG, OE3JPC and UR5LX. He added on 14 Feb N2IQU on CW and a 15 min SSB rag chew, and on 15 Feb JA9BOH and JA5OVU. Steve wholeheartedly agrees with Willi's (LX1DB) comments that the primary objective of any EME contest is to promote EME activity and encourage new stations to become QRV. This has always been Steve's objective in analyzing the Moon data and recommending specific dates. He also notes that it is virtually impossible to win the ARRL EME contest on 432 or 1296 from NA due to the much higher activity in Eur. Steve has learned to live with this fact and concentrates his efforts into getting more NA stations active on EME instead of complaining about the contest dates or rules. He is disappointed to observe over the years that the operators who complain the loudest over the selected contest dates never seem to propose any specific contest dates themselves. They instead tend to criticize the recommendations of others. 70 cm EME totals for K1FO are: #531 initials, 49 states and 75 DXCC.

#### K<sub>1</sub>OR

John's 70 cm report for the Feb NL -- I QSO'd on 9 Feb K0RZ (O/O) and NC1I (449/449) both initials, #16 and #17, and on 15 Feb KD4LT (O/O) #18, but missed my sked with UR5LX. I also had a sked in Feb with SV1BTR, who was heard but no QSO. I want to reschedule with both these stations. The random game is fun, but progress is slow, so I need to make more skeds. I still don't feel that I am hearing as well as I should with my 4 x FO33 array. Sun noise is generally about 11-11.5 dB. On TX I have 1.5 kw. I plan to be active in the Dubus/REF contest in March.

### **K40I**

Russ writes -- I'm still limited to 432 operation, but I think my shoulder is getting strong enough to allow change of feeds. I'm leaving on 12 Feb for a business trip to Israel and Sweden, so by the time I'm back, I should be able to QRV on 1296. I worked on 432, on 6 Feb EA3DXU, I5CTE, K1FO, DL9NDD, G3LTF, G4ERG, DL4XX, K2UYH, RA3LE, UR5LX and DF3RU, on 7 Feb NC1I, IK5QLO, S25CW, W7CNK (initial), K0RZ, DK3WG, ON4KNG, SV1BTR for another initial and new DXCC, G4RGK and UA6LGV, and on 8 Feb DL4KG, KA0RYT, K5GW and NC1I on SSB. I'm against putting the EME contest on the same week end as the Sept VHF contest. With the level of inexperienced activity around here and a lot of other places, EME ops would go "nuts" with the QRM from tropo stations. Also, I don't think you can be serious about both the EME contest and the VHF contest during the same weekend, if you are a single operator. And the rules do not allow for more than one signal per band for the multi-ops.

## **KA0RYT**

Ron was QRV in Feb. He QSO'd during the pre-SW WE2Y and SV1BTR (O/O) on the Tuesday before the SW in e-mail skeds, but did not hear anything out of HA1YA. He found 432 activity sparse on Friday eve of the SW (Saturday Z), and only had a partial with K2UYH - [I thought we had a QSO]. The next day he worked K4QI and K5GW, but had no luck with Eur.

#### **KB0PYO**

Mark completed during the Feb SW with G3LTF (O/O) and K5JL on random. He had several stations call him on SSB, but his rig uses LSB for CW, so cross mode does not work. If anyone knows of a way to shift the Icom IC735 CW mode to upper side band, please let Mark know. [You could use an audio oscillator to generate CW (through the mice input) in USB mode.]

#### KD4LT

Scott had a good time on 23 cm in the SSB Contest. He made around 12 SSB contacts, and added 7 initials with GW3XYW, F2TU, DF3RU, PY5ZBU, W7BBM and K2UYH. He also added a new one 70 cm with SV1BTR. Nil was heard from 9H1ES on 23 cm. His power on 1296 is now above 600 w. During the post SW Scott worked K1OR and W7CNK for initials #309 and #310.

#### **N2IOU**

Mark expresses frustration. He was all set to operate the SSB Contest on 1296 in a big way. But Murphy made an appearance, and he worked only 6 stations... After only 25 min of operation his elevation motor crapped out!

## NC1I

Frank reports conditions on 70 cm during the pre-skeds weekend were excellent -- Unfortunately, my time was limited and I only was able to be on for a little while. Activity seemed very good for a non-SW. The following stations were worked: On 31 Jan at 1832 N2IQU (589/589), 1856 G4RGK (539/539) and 1905 DL4KG (549/559), on 2 Feb at 0021 W7CNK (559/559), 0030 WA4NJP (44/55) - Ray called me while I was demonstrating my SSB echoes to a non ham visitor and reported that he was running just 200 w, 0201 JA5OVU (579/579), JA3SGR CWNR - I was surprised to hear JA activity at this time and 0248 K1FO (589/579) - the loudest I have ever heard Steve. Conditions during the activity weekend did not seem nearly as good. Activity appeared to be about the same as last month. I was not able to spend as much time on as hoped. We also had to deal with another ice storm on Thursday. Fortunately we only received about 3/8" of ice and it quickly melted from Friday's sunshine and above freezing temperatures. JA activity was light the 1st night (opening day of the Olympics). I did not stay on for the Asian window the 2nd night. Contacted on 7 Feb were at 0115 DL9NDD (569/569), 0126 W7CNK (559/449), 0138 S52CW (439/559), 0149 K4QI (579/579), 0319 K0RZ (569/569), 0332 W8MQW (569/579), 0345 W7GBI (579/569), 0403 N9AB 579/579), 0535 JA2TY (549/559), 0552 JH4JLV (559/559), 1957 DL8OBU (539/549), 2009 DL9KR (589/589), 2025 ON4KNG (559/559), 2035 G4RGK (449/559), 2055 DL4XX (449/529) and 2356 UR5LX (579/579), and on 8 Feb at 0047 DL4KG (549/559), 0100 W7QX 549/449), 0109 UA6LGH (569/569), 0120 KB8ZW (559/559), 0150 DF3RU (569/579) - also had a nice SSB chat with Karl, 0208 K4QI (55/55) on SSB, 0213 KL7HFQ (549/559), 2208 G4ERG (439/559) and 2219 OE3JPC (439/439), and on 9 Feb at 0014 UA6LGH (559/559).BBR> I have been checking out the PA0ZN WEB site and it's a real shame more people are not utilizing it. My new e-mail address is: Frank, NC1I I hope to work everyone next month during the DUBUS/REF Contest.

### **OE9XXI**

Peter reports - On 1296 on 5/6 Jan I contacted DF4MAA, DF5MN and DK5MV (549/539)V for an initial. All calls were from the same station (4 yagis and 500 w) and DJ9YW (55/57)V on SSB. In the 1st NL 23 cm SSB Contest I made 25 QSOs in 13 fields for a score of 624 points. My contest log read as follows: on 7 Feb at 1518 DF3RU (44/54) JN59, 1522 JH5LUZ (55/58) PM63, 1526 S59DCD JN76 (55/58), 1555 G4VCCH (44/55) IO, 1701 9H1ES (33/44) JM, 1718 G3LTF (54/56) IO91, 1733 ON5RR (54/58) JO40, 1738 F2TU (55/55) JN, 1816 GW3XYW (55/54) IO71, 1845 OZ4MM (55/57) JO, 1853 CT1DMK (44/56) IN, 2257 OH2AXH (55/58) KP30, 2301 K2UYH (55/58) FN20, 2304 K5JL (55/57) EM15, 2307 ZS6AXT (559/56) KG33, 2309 K2DH (55/57) FN, 2312 WD5AGO (55/56) EM, 2313 W2UHI (55/57) EN73 and 2330 WA9FWD (33/55), and on 8 Feb at 0016 LX1DB (57/57) JN39, 0039 KD4LT (55/57) EM81, 0055 HB9SV (57/58) JN45, 0108 PY5ZBU(449/55) GG54, 0026 W0KJY (44/55) DN and WA8ZWG (33/55) EN. On 5760, worked by V OE9PMJ and OE9YTV back on 12 Dec were JA7BMB (449/549) - fine signals, on 9/10 Jan V IK2RTI (549/529) and W5ZN (O/O) . My standings are now on 23 cm #221 initials, 40 DXCC, 30 WAS and 32 fields; on 13 cm #50 initials, 19 DXCC, 10 WAS and 15 fields, and on 6 cm for OE9YTV #15 initials, 11 DXCC and 3 WAS, and for OE9PMJ #14 initials, 10 DXCC and 3 WAS.

### **OK1KIR**

Tonda, OK1DAI, writes about Jan and Feb activity -- On 432 MHz, we worked on 6 Feb at 2210 DL4XX (O/O) and heard DF3RU, DF5LN, DL9NDD, G3SEK, G4ERG, K0RZ, K1FO, K2UZF

[K2UYH?], KD4LT, N2IQU, OZ4MM, PA3CSG, SV1BTR, UA6LGH, UR5LX, W0KJY, W7CI and WI7Z. In skeds we QSO'd on 10 Feb at 2201 SV1BTR (O/O) for initial #334, the 1st SV-OK 70 cm QSO and DXCC 63, and heard DL4MEA. On 1296 MHz, we worked on 10 Jan at 0027 W2UHI (559/559), 0035 K2UYH (559/559), 1953 G3LQR (439/449), 2007 G4CCH (O/O), 2032 IK6EIW (539/539) for initial #147 and nil in sked with PY5ZBU; (heard in Jan were CT1DMK, DD1XF, DF3RU, DJ9YW, F2TU, G3LTF, GW3XYW, HB9BBD, HB9SV, JH5LUZ, K5JL, KD4LT, LA8LF, OE9ERC, PA3CSG, S59DCD, W4OP, W7GBI, WD5AGO and ZS6AXT); and on 8 Feb at 0232 G4CCH (O/O), 2131 W3XS (439/439) #148, 2201 K9BCT (O/O) #149, nil 9H1ES, nil PY5YBU and nil NP4B; (heard in Feb were DJ9YW, F2TU, G3LQR, G3LTF, HB9BBD, K2DH, K5JL, KD4LT, PY5YBU (449) in QSO with KD4LT, S59DCD, VE1ALQ, VE6TA, W2UHI, WA8WZG and ZS6AXT). On 5760 MHz we had a partial on 7 Feb at 1530 with JA7BMB (O/-). We used linear pol and Hiroshi used circular pol. We plan another sked on 1 March with circular pol on both sides and in Perigee conditions. At 2345 we heard I6PNN CQs and on 8 Feb at 0001 had another partial with IK2RTI (M/nil). In sked with W5ZN nil. We will plan to be active during the March SW on 23 cm.

#### **ON5RR**

Marc was QRV on 1296 for the SSB Contest -- After some work on the antenna in a rainy and ice water atmosphere, the station was back on the air on 7 Feb at about 1700. The dish suffered little damage in the winter. We had rather windy weather for over 1 month. Only a little re-stressing of the dish and readjusting of the AZ and EL control was necessary. The following SSB contacts were made with OE9XXI, HB9SV and OH2AXH for a score of 6x2. On CW we worked ZS6AXT, OZ4MM and HB9BBD. An initial was also added to our list with CT1DMK (on CW). We heard GW3XYW, N2IQU, VE1ALQ, W2UHI and K2UYH - just before shutdown at 2130.

#### **OZ4MM**

Stig was active on both 70 and 23 cm in Feb -- I logged the following QSOs this month starting on 6 Feb on 432: DL4XX, RA3LE, DF3RU, SV1BTR for initial #157 and DXCC 36, K1FO, I5CTE and finally G4ERG. On Saturday in the SSB 1296 Contest I worked ON5RR JO (449/539) - on CW, HB9SV JN (57/55), G3LTF IO (44/54), F2TU JN (45/44), OH2AXH KP (45/56), K2DH FN (55/55), DJ9YW JO (44/52), S59DCD JN (44/56), LX1DB JN (56/57), ZS6AXT KG (559/569) - on CW, K2UYH FN (55/55), K5JL EM (56/56), GW3XYW IO (45/44), CT1DMK IN (33/54), OE9XXI JN (57/55), WB5LUA EM (45/55), KD4LT EM (44/54), PY5ZBU GG (449/559) - on CW #132 and DXCC 34 and W2UHI EN (44/44). This should give 16x8 or 128 points. It was a great pleasure to work the SSB Contest. I think everybody had fun! I am looking forward to the coming REF/DUBUS Contest weekends with great anticipation as usual.

#### PA3CSG

Geert writes -- I have improved my 23 cm RX system. I guess I have to apologize, my NF was between 2.5 and 3.5 dB due to a bad relay... so I didn't hear much. I did copy 9H1ES in that shape, HI. I worked PY5ZBU on 23 last weekend, nil in the 4X6UJ and 9H1ES skeds. On 70 cm I worked DL4XX, SV1BTR, K7XD on random, DL5FN, WE2Y and W7CNK on sked. All QSOs completed easily.

## **S59DCD**

Silvo notes that his report in last month's NL was mistakenly listed as being from S52CW. [It should have read S59DCD - our apology for this error.] Only S59DCD is currently QRV on 23 cm.

#### **SV1BTR**

Dimitris (KM17vx) at:

<u>Dimitris, SV1BTR</u> is now QRV on 432 and reports -- Still a lot of room for improvement on my RX side due to man-made noise - sorry to those on sked or random who called and got no reply. My station is 4 x 11 wl BV yagis with both H/V pol, 1.3 kw PA, MGF1302 1.3 dB NF preamp, DSP-9 Timewave filter and Kenwood TS- 790E. I QSO'd on 1 Feb DL9KR (529/559) and K1FO (O/O) for initial #5, and on 3 Feb SM3AKW (M/M) #6 and KA0RYT (O/O) #7. After re-tunning my preamp on 432.500, (I had no crystal available for testing at a lower frequency), I added on 5 Feb VE1ALQ (O/O) #8 and DXCC 5, on 6 Feb OZ4MM (529/549) #9 and DXCC 6, PA3CSG (O/O) #10 and DXCC 7, UR5LX (O/O) #11 and DXCC 8,

W7OX (O/O) #12 and KD4LT (529/549) #13, on 7 Feb K0RZ (O/O) #14, DL9KR (559/559), G4ERG (M/M) #15 and DXCC 9, N4GJV (529/449) #16, K4QI (539/549) #17, DL9NDD (O/O) #18, IW5AVM (O/O) #19 and DXCC 10 and W7FN (O/O) #20, on 10 Feb DL4MEA (M/M) #21 and OK1KIR (O/O) #22 and DXCC 11, and on 14 Feb K2UYH (529/559) #23. Nil was heard from F1ANH, DK3WG, G3SEK, HA1YA (no moon below 5 deg el at moonset), JA9BOH (too much QRM below 20 deg el at moonrise), G3LTF (I could only use V pol due to problems with my polarity relay), EA3DXU, ZS6AXT, K1OR, K7XD and KB3PD. I have noticed that it is impossible to copy signals below 20 deg el at my moonset in H polarity due to ORM (state-side window). Generally speaking from these 1st observations, I am copying the majority of US stations in V pol and Eur stations in H pol. However, in V pol I am having QRM problems from FM radio stations and in H pol terrible QRM problems from UHF-TV, especially at moonrise-moonset. In April I hope to have my RX side improved by installing a WD5AGO preamp and a bandpass filter, 20 MHz wide at the preamp's input with an insertion loss of 0.15-0.2 dB. This filter consists of 4 quarter-wave linear resonators with aperture coupling. Since I became QRV, I have been using a 2 stage, .9 dB NF, MGF1302 LNA with a HB highpass filter in the input with an insertion loss of at least 0.5 dB. Unfortunately, I did some tests and found that taking the HP filter out caused the QRM to increase to 30 dB over 9. When I installed the filter after the 1st stage QRM was still extremely high. I would like fellow operators to be patient when calling me due to the existing situation and severe man-made noise problems that I encounter. Working on random is tough for me right now, at least until April. The ability to switch between H/V pol is a great help. This along with the suggestions/advice of DL9KR, PA3CSG, WD5AGO, JA9BOH, W7FN, KA0RYT and others is much appreciated. Also big thanks to F/G8MBI for patiently counseling me on so many aspects of 432 MHz EME. My mailing address is DIMITRIS VITTORAKIS, AGIAS LAVRAS 11-13, 15773 ZOGRAFOU, ATHENS, GREECE.

#### **UR5LX**

Sergej is now up to initial #359, DXCC 59 and WAS 39. He added initials since the ARRL Contest with DL4XX, WE2Y, DL5FN, KN6M, SV1BTR, JA5NNS, K7XD and K1OR.

#### **W2UHI**

Frank is regularly active on 1296. He worked on 1 Feb OE9ERC and DJ9YW. The SSB Contest was interesting ... sounded like 20 m on SSB... Frank added initials with WA9FWD and W7BBM. He worked 12 stations in 10 squares on SSB for a score of 240 points. During the post SW, Frank QSO'd N2IQU, K5JL, K2UYH and WD5AGO.

## **ZS6AXT**

Ivo's report for the last SW -- During the 7/8 Feb I worked on 23 cm DL0SHF, S59DCD (CW/SSB), G3LTF, ON5RR, W2UHI, VE1ALQ, OZ4MM, K5JL, K2DH (CW/SSB), OH2AXH (CW/SSB), OE9XXI (CW/SSB), GW3XYW, F2TU (CW/SSB), DJ9YW, HB9SV (CW/SSB), JH5LUZ (CW/SSB) and HB9BBD. CWNR were K2UYH (many times), N6BQ, LX1DB and DK7LJ - (he must have a problem on receive). Heard were JA6CZD, G4CCH and W3XS. It seemed that the SSB stations were looking only for SSB signals! There was very poor activity on Sunday night. Conditions were quite good, I could copy most of the time the SSB stations well. The 6 cm report in the last NL was a bit misleading. The fact is that my equipment is close to ready. At the moment I am battling with my 2nd LNA which is not always stable. I am still looking for preamp suggestions. Despite this, I am sure to be QRV for the DUBUS Contest, 2nd part, at the latest. Since my setup will not be water proofed, (LNAs and PA installed in the feed of the dish), I will be only able to operate in good WX and on skeds. It is quite an exercise to install the 6 cm gear as the center of my dish, which is 6 m above the ground. I plan to build scaffolding to make the feed work easier.

## **K2UYH**

I repaired my FT726 70 cm module which had been acting up for months, and was on 432 the 1st night of the SW, and on 1296 the 2nd for the SSB Contest. On 432, I worked on 6 Feb at 2315 DL9NDD (559/559) and 2328 K4QI (559/559), and on 7 Feb at 0000 IK5QLO (449/449) for initial #591, 0025 DF3RU (55/56) on SSB, 0050 W7QX (449/449), 0107 KA0RYT (559/559), 0334 N9AB (559/559), 0337 W7GBI (559/-) - lost Charlie, 0357 K0RZ (559/569), 0704 W7CNK (O/O) #592, 0720 partial WE2Y -

thought JA2TY was replying to me and 0728 JH4JLV (449/449), on 9 Feb at 0430 WE2Y (559/569) #593, on 13 Feb at 0500 DL4MEA (559/569) #594, and on 14 Feb at 0530 SV1BTR (559/559) #595. On 1296 I QSO'd on 7 Feb at 2217 OH2AXH (55/54) KP20, 2222 OZ4MM (55/55) JO55, 2229 G3LTF (54/54) JO91, 2232 KD4LT (54/55) for initial #150, 2234 KB2AH (56/55) FN20, 2238 K2DH (55/55) FN12, 2242 GW3XYW (55/54) IO71, 2245 WD5AGO (55/55) EM26, 2248 K5JL (55/55) EM15, 2253 LX1DB (56/56) JN29, 2300 OE9XXI (58/55) JN47, 2305 W2UHI (549/55) EN73 CW-SSB, 2311 F2TU (54/54) JN38, 2321 W2UHI (55/53) - repeated on 2-way SSB, 2326 VE1ALQ (54/54) FN65, 2330 nil 9H1ES and 2354 DF3RU (44/44) IN, on 8 Feb at 0025 CT1DMK (449/44) in CW-SSB, 0041 CT1DMK (34/44) - repeated on 2-way SSB, 0122 PY5ZBU (O/559) #151 and DXCC 35 on CW, 0320 partial V W7BBM (M/-) - could not pull through, 0333 V WA8WZG (34/44) EN, 0657 NL7F (34/44) and 0725 K5JL (56/56) EM dup, and on 15 Feb at 0530 9H1ES (O/O) #152 and DXCC 36. I had a great time in the SSB Contest and made 17 QSOs on SSB and one on CW-SSB in 9 squares for 315 points. I also worked NL7F on SSB, but could not get him to send his grid sector. CWNR was G4CCH. After the contest I discovered that my 1296 preamp had degraded and was only giving me 6 dB of gain with a .95 dB NF! /FONT>

## **NETNEWS**

JR4AEP has had troubles with his 432 16 yagis since last July. As he has not repaired them, he can not accept any 432 sked requests until further notice.

W1ZX's dish is working great.

NU7Z is looking for 3 cm skeds. During the SW he had a partial on 10 GHz with N4MW. He is awaiting 5760 QSL cards from OE9PMJ and OE9YTD. Rick is planning operation on 903 for May SW.

WA8WZG is QRV on 5760 again.

K3HZO is seeing only 7 dB of Sun noise on 70 cm and 23 cm. He needs QSL cards from SM4IVE and OH2PO.

F/G8MBI is QRV on a 70 cm EME system using 4 (V/H switchable) crossed yagis and a 100 w brick.

F1CH is the new call to be used by F5SDD and his associates during the REF/DUBUS Contest. The group is expanding to 8 x 26 el yagis. They also have 500 w on 1296.

W7CNK is QRT on 10 GHz - his receiver is ok, but his TWTA is no good. He is QRV on 5.7 GHz with great echoes, and on 70 cm with 450 w.

EA6ADW has new e-mail address: EA6ADW for DL.

LU4HO confirms 432 QSO with N2IQU in Oct. He heard K1FO in Feb.

DL5FN worked UR5LX in Feb. G4RGK is QRV on 70 cm again with 8 yagis. Dave worked K1FO and NC1I.

W7BBM missed his DK3WG sked due to a bad relay.

DL9KR worked in Feb RV4AQ LN grid for a new station and grid. Jan is looking for QSLs from K7XC and W7KK/6.

N6BQ's HPA is working well with 900 w out. Hoppie QSO'd VE1ALQ and W2UHI the 1st night of the Feb SW.

DJ7FJ will be QRV 1st weekend in March on 10 GHz and 5.7 GHz.

SM2CEW worked F/G8MBI. ON5OF's array is down.

WB0GGM worked W7BBM and DL9NDD in Feb, but hear nil on JA skeds.

VE1ALQ QSO'd W7CNK on 70 cm.

VE6TA was on 23 cm during the Feb SW. Grant had a partial with OE9XXI and worked K5JL on CW.

K7XD is up to initial #8 on 70 cm.

W7FN had a good QSO with SV1BTR, but did not hear anyone else except SM3AKW.

W7QX worked SV1BTR, N2IQU, K2UYH, K5GW and NC1I during the SW.

KL7HFQ was on during the SW, but made no contacts. He heard some SSB and SV1BTR. He is still limited to AZ less than 180 deg.

EI6GF is now listened on 70 cm EME. Mich heard NC1I and others. He has 8 x 15 el 4.2 lambda yagis, but is looking for designs of longer boom yagis.

LY2WR is reported to have 1 yagi and a lot of power on 70 cm.

UN7AX is a new station with 100 w and 1 yagi.

K2DH worked W7BBM on 23 cm.

WA9FWD was back on 23 cm for the Feb SW. He CWNR W4OP for quite a while. Heard were W2UHI, K5JL, KB2AH - very well and OE9XXI - good on SSB. John won't be on again untill the next SW.

ISTDJ worked JA5OVU on random during the SW. DK3WG added a new one, JA5NNS, on random.

S53J is a new 70 cm station with 4 yagis and 100 w, (a club station). They plan to be only QRV on random.

HA1YA will be QRV during REF/DUBUS Contest.

DF3RU completed with WE2Y - good signals.

## FOR SALE

PA3CSG has for sale a 10 GHz LNA with waveguide input, 3 stages, NF abt. 0.8 dB and gain of 30 dB with a MGF4918D 1st stage.

W7CNK is looking for 6' of Teflon coax..

K7XC is looking for a 4CX400a from Svetlana.. KB2AH has a full line of cavity amps and 1, 2, 4 and 6 tube ring amps, lin/circular feed horns and LNAs for 432 and 1296.. Tom also has mounting blocks for K1FO yagis.. For full details see:

Tom's 1296 WEB page Tom's 1296 WEB page

for more details and pricing info e-mail:

KB2AH

or phone 908-223-5067, FAX 908-223-0901 (24 hrs) or voice 908-223-8124

## **PARIS 1998**

Registration is going well. The best way to register and get information on the conference is by way of the conference WEB page at:

#### **EME 1998**

(A copy of the registration form is included with this NL for those who do not have access to the WEB.) As of 15 Feb 21 people (and 7 YLs) have registered and 11 of them have paid their 30% deposit or more (100%). Registered are DD1XF, DJ6MB, EA3DXU, F1ANH, F3VS, F6HYA, HB9AGE, HB9JAW, HB9JBL, I5CTE, I5TDJ, KD4LT, NC1I, ON5RR, OK1CA, OK1DFC, OZ4MM, RW3BP, W1QA, W5LUU and ZS6AXT. Remember that the deadline for payment of your deposit is March 31st, THIS YEAR! SHARING ROOMS: It may not well be understood that if you are single and you chose a double room, you may want to choose who you share with. Tell us, or we will choose for you. If you want to have a chat with a possible partner, you can meet on our mail list. To subscribe send a message to without any subject. The body message is then: subscribe, your 1st name, last name, callsign. You will then receive an acknowledgement within a short time. Another solution is to go to: PHOTOS

We have been asking for photos of yourself and your equipment/antennas, with some text describing what we see. This is for the Proceedings Book and the WEB site. We only have three photos... We suggest that you send yours (floppy disk (3.5") or photos) along with your registration or by e-mail to: F1EHN e-mail

Hurry up!

## **CONFERENCE, TECHNICAL MATTERS:**

We need more conference talks. Any ideas, any volunteers? Please send your papers as soon as possible to Hervi F5HRY. We need time to edit and process your article for printing and binding.

## **FINAL**

Al, WB5LUA has contacted Steve Ford, WB8IMY at the ARRL concerning the EME Annals list which appears in the March issue of QST. He has obtained agreement from the ARRL to use W0KJY's list as source for their EME Standings list. So if you are up to date with Jim, you should be correct in the ARRL listings. Data may be sent directly to Steve by e-mail at: <a href="Steve">Steve</a>, <a href="WB8IMY">WB8IMY</a> or to:

<u>Jim</u>

Since this agreement the March EME list has been published in QST, but it does not appear that the ARRL has abided by this agreement.

Rein, W6/PA0ZN is doing a trully outstanding job on the NL WEB page. He reports that the graphics that go with the Step Impedance LP Filter Article by PA3CSG have been added to the Feb NL file. As there has been some questions about graphics, pictures etc, Rein explains the following: "I get an the newsletter text from Al (K2UYH) as soon as it is finished. This version is transmitted over the internet and I make it one of my highest, if not the highest priority to get it on the WEB. Al sends the actual master copy of the newsletter by mail to my home in California. The text version can be processed away from my home, anywhere I receive it. The graphics however, need to be scanned in and in order to do this, I have to be at home with the pictures and a scanner. As I happen to travel quite a bit for work, the adding of the graphics are sometimes delayed longer than I would like them to be, but then I do still have to work... Again, I try to get these on, as quickly as possible. TNX fer your understanding."

Please keep the info coming. We need more technical material. I hope to CU you all off the Moon during the REF/DUBUS Contest. 73 and GL in the contest,

73, Al - K2UYH

?

#### Sponsored by REF and DUBUS

Note that the 432MHz and >2.3GHz section on 7/8 MARCH !!!!!!!

144/1296MHz is on 4/5 APRIL (for lower sky noise on 144MHz, and to reduce QRM from the European tropo contest in March).

#### 1. Contest Dates & Periods

The contest happens during two full weekends: 144 and 1296MHz on the APRIL weekend, and 432 MHz and all other bands on the MARCH weekend. Each weekend of the contest begins at 00:00 UTC on Saturday and ends at 24:00 UTC on Sunday.

#### 2. Bands and dates

First weekend: 432MHz, 2300MHz and above 7/8 March 1998 Second weekend: 144MHz and 1296MHz 4/5 April 1998

#### 3. Categories

QRP 144MHz <100kW EIRP 432MHz <400kW EIRP 1296MHz <600kW ERP >= 2300MHz no separate QRP/QRO categories

QRO EIRP equal to or greater than stated above.

PRO Non-amateur equipment or antenna.
PRO stations will not be ranked.

#### 4. Exchange

Callsigns + TMO/RST + R.

#### 5. Scoring

100 points for each random QSO completed.
10 points for each sked QSO completed on bands below 2.3GHz.
100 points for each sked QSO completed on 2.3GHz or higher bands.

## 6. Multipliers

Each DXCC country (except W/VE/VK), or EACH INDIVIDUAL STATE worked in W/VE/VK. Multipliers count only if worked by RANDOM (except on 2.3GHz or above). States and provinces can be determined after the contest using address lists in recent Newsletters or in DUBUS.

- 7. Band Total: Sum of points multiplied by sum of multipliers.
- Final score for multiband entries: (Total sum of points on all bands) \* (total sum of multipliers on all bands)
- 9. Classifying

Top scores define one winner per band and one multiband winner. Multiband stations will also be classified on each separate band worked. There are no separate multi-operator classes. Multi- operator and QRO stations will be highlighted in the general classifications.

## 10. Reporting

Copy of the log for each band with details of points, multipliers and total points.

The following information MUST also be included:

- 1. Output power, transmit cable loss, antenna type and gain.
- 2. Working category: QRO/QRP, mono/multi operator
- Name(s) and signature(s) of all operators
   Locator/State.

Other information is welcome: Comments, conditions, grid locator, station details, photographs, etc...

#### 11. Awards

A certificate will be sent to each entry. All band winners and the multiband winner will receive a trophy.

In each section, the highest-scoring station in the southern hemisphere will receive a special certificate < DUBUS

#### 13. Referee

Responsible for rules and general questions is:

Ian White, G3SEK 52 Abingdon Rd.

Drayton, Abingdon, Oxon OX14 4HP England

Tel.: (++44)1235-531559 E-Mail: <u>Ian, G3SEK</u>

EME PARIS 1998 REGISTRATION

CALLSIGN First Name : Last Name : Address City ZIP : Country

#### Conference fees

	ОМ	YL	CHILDREN	TOTAL
FRIDAY	 x 180 FF	x 180 FF	x 90 FF	FF
SATURDAY	 x 550 FF	x 550 FF	x 275 FF	FF
SUNDAY	 x 350 FF	x 350 FF	x 175 FF	FF

## Accommodation, per person

	Single	Double	
FRIDAY	x 295 FF	x 190 FF	FF
SATURDAY	x 295 FF	x 190 FF	FF
Options			FF
			FF
		TOTAL	FF

If you're single and you choose a double room, please tell us the one you want to share with, if planned:

If not planned, we will have to choose for you please send this registration form to: "Jean Jacques MAINTOUX, 30 Rue de Villacoublay, 78140 VELIZY, France" or mail it to: jjm\_flehn@msn.com

		Skeds for MAR	1					
Time	432.040							
	W7CNK -HA1YA							
1900z	W7QX -HA1YA							
		Skeds for MAR	7					
Time	432.040	432.045	432.050	432.055				
0130z	LU4HO -DL3EAG							
1400z	IKOBZY-PA3CSG							
1430z	EA3DXU-DL3EAG							
1500z	DL3EAG-UT5EC			PA3CSG-JJ1NNJ				
1530z	DK3FB -UT5EC			PA3CSG-JH7PAV				
1600z	G4RGK -JH4JLV							
2030z	W5ZN -G4RGK	WB2VVV-DL9NDD	K1OR -PA3CSG	N2HLT -DF3RU				
2100z								
2130z			WB4BKC-PA3CSG	K3HZO -DF3RU				
			NA4N -PA3CSG					
	LU4HO -DK3FB			WB4BKC-DF3RU				
	K3HZO -DK3WG			W8MQW -DF3RU				
2330z	K7XC -UR5LX	W7CNK -HP3XUG						
Skeds for MAR 8								
Time	432.040	432.045	432.055					
0000z	W7CNK -UR5LX	LU4HO -DL9NDD	KAORYT-DK3FB					
0030z	W7BBM -UR5LX	VE6TA -DK3FB	KAORYT-DL3EAG					
0100z	W7BBM -DK3WG	VE6TA -DL3EAG	K7XC -DF3RU					
0130z	W7BBM -VE1ALQ	LU4HO -OZ4MM	W6WE -DF3RU					
0530z			JH1EFA-K2UYH					
0600z			JA5NNS-K2UYH					
1930z	YO2IS -SV1BTR	DL4XX -G4RGK						
2000z	DK3WG -SV1BTR	DL4MEA-G4RGK						
	KB3PD -SV1BTR	K3HZO -G4RGK						
	G4RGK -SV1BTR							
	W1ZX -SV1BTR							
	KB3PD -S52CW							
		WB2VVV-G4RGK						
		DL4KG -G4RGK						
2330z	KB3PD -LU4HO	NA4N -G4RGK	EA3DXU-IK5WJD					

Skeds for MAR 4

Time 1296.050

2330z WA9FWD-K2DH

Skeds for MAR 7

```
1296.050
Time
2100z PY5ZBU-ON5RR
2200z KB0PY0-DJ9YW
2230z VE1ZJ -DJ9YW
2300z WA9FWD-PA3CSG
2330z WA9FWD-KD4LT
                 Skeds for MAR 8
Time
     1296.050
                    5760.100
0000z WA9FWD-W4OP
                    W5ZN -OK1KIR
2100z DH9FAG-OK1KIR
2130z NP4B -OK1KIR
2200z 9H1ES -OK1KIR
2230z 9H1ES -KD4LT
2330z KBOPYO-OK1KIR
```

RW3BP, 10 Ghz EME, with offset feed Dish, from top of apartment building (Tnx, W5VJB)

Close Up of Feed, LNA and HPA of the RW3BP 10 GHz EME antenna.

2 \* 28 el, 9 wavelength Yagi's for 432 MHz at IK5QLO

# **Leave Contest Info or Comments to Allen Here**

This information was obtained from: **Scott**, **KD4LT** 

**Top Page** 

For Comments or corrections: Rein, W6/PA0ZN